



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,399	10/11/2001	Kenneth D. Rector	9884	1275

26890 7590 08/01/2005

JAMES M. STOVER
NCR CORPORATION
1700 SOUTH PATTERSON BLVD, WHQ4
DAYTON, OH 45479

EXAMINER

TANG, KENNETH

ART UNIT PAPER NUMBER

2195

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,399

Applicant(s)

RECTOR, KENNETH D.

Examiner

Kenneth Tang

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This final action is in response to the Amendment filed on 5/5/05. Applicant's arguments have been fully considered but are not found to be persuasive.
2. Claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliot et al. (hereinafter Elliot) (US 2002/0064149 A1).**

4. As to claim 1, Elliot teaches a method for scheduling access to processor resources of a database, the method comprising the steps of:

initiating one or more database sessions each in response to one or more user logon ([3270], [3276]);

initiating a plurality of tasks in response to commands received from the one or more database session (from interface after logon) ([3270]);

Art Unit: 2195

classifying each of the plurality of tasks into one of a first set of groups based at least in part on one or more logon account attributes associated with the one of the one or more database sessions that initiated that task ([1121], [3305]);

assigning a weight to each group of the first set of groups (priority queuing technique such as Weighted Fair Queuing) ([0598]);

classifying each of the plurality of tasks into one of a second set of groups ([1121]);

assigning a weight to each group of the second set of groups (priority queuing technique such as Weighted Fair Queuing) ([0598]);

selecting a first task from the plurality of tasks (selecting based on priority) ([0598], [0582]); and

limiting (priority scheduling and Prioritizing Access) the first task's access to processor resources of the database based at least in part on the weight of a group from the first set of groups in which the first task is classified and also based at least in part on the weight of a group from the second set of groups in which the first task is classified ([0598], [0582]).

5. As to claim 2, Elliot teaches where classifying each of the plurality of tasks into one of the second set of groups includes:

classifying each of the one or more database sessions into one of a third set of groups based at least in part on one or more logon account attributes associated with that database session ([1121], [3305]);

assigning one or more time periods to each group of the third set of groups ([0598]);

assigning one group from the second set of groups to each of the time periods ([0598]);

Art Unit: 2195

determining the current time ([1357] and [3652]); and

classifying each task in a group from the second set of groups corresponding to the time period assigned to a group from the third set of groups in which the database session that initiated that task is classified and that includes the current time ([1121], [1357] and [3652]).

6. As to claim 3, Elliot teaches where classifying each of the plurality of tasks in one of the first set of groups includes:

classifying each of the one or more database sessions into one of a third set of groups based at least in part on one or more logon account attributes associated with that database session ([1121]);

associating each group in the third set of groups with one group of the first set of groups ([0598]); and

classifying each task in a group from the first set of groups that is associated with a group from the third set of groups in which the database session that initiated that task is classified ([1121]).

7. As to claim 4, Elliot teaches where classifying each task in one of the second set of groups includes:

classifying each of the one or more database sessions into one of a third set of groups based at least in part on one or more logon account attributes associated with that database session ([1121]);

Art Unit: 2195

assigning one or more resource usage ranges to each group of the third set of groups
(0598));

for each of the one or more resource usage ranges, assigning a group from the second set
of groups ([1355] and [1121]);

determining a recent resource usage of each database session ([0553] and [1083]); and

classifying each task in a group from the second set of groups corresponding to the
resource usage range for the group of the third set of groups in which the database session that
initiated that task is classified and that includes that database session's recent resource usage
([1121], [0053], [1083]).

8. As to claim 5, Elliot teaches where the recent resource usage is a current resource usage
(current utilization statistics) ([1203], [1240]).

9. As to claim 6, Elliot teaches where the recent resource usage is a measurement of
processor and input/output usage during a preceding time period ([1203], [1240]).

10. As to claim 7, Elliot teaches where the preceding time period is 60 seconds ([3940],
[4008]).

11. As to claim 8, Elliot teaches where the extent to which access is limited is recalculated
periodically (periodically generate statistical information) ([0889]).

Art Unit: 2195

12. As to claim 9, Elliot teaches providing device driver access (access device) to the plurality of tasks in order of a priority (a prioritizing access router) based at least in part on the weight of the group from the first set of groups in which each task is classified and also based at least in part on the weight of the group from the second set of groups in which each task is classified ([0582]).

13. As to claim 10, it is rejected for the same reasons as stated in the rejection of claim 1.

14. As to claim 11, Elliot teaches where the plurality of tasks are each classified into one of the first set of groups based at least in part on one or more logon account attributes associated with the database session that initiated that task ([1121]).

15. As to claims 12-19, they are rejected for the same reasons as stated in the rejection of claims 2-9.

16. As to claim 20, Elliot teaches a scheduled resource access database system (similar to the rejection of claim 1), comprising:

- one or more nodes (computer nodes) ([1027]);
- a plurality of data-storage facilities, each of the one or more nodes providing access to one or more of the data-storage facilities (inherent that a computer has memory) ([1027]);
- a plurality of CPUS, each of the one or more nodes providing access to one or more of the CPUs ([1027]);

a plurality of virtual processes, each of the one or more CPUS providing access to one or more of the virtual processes ([0019]);

each virtual process configured to manage data stored in one of the plurality of data-storage facilities ([1578]); and

a priority scheduler component (using the priority queuing technique such as Weighted Fair Queuing) configured to control access to the virtual processes by a plurality of sessions of the database system, the priority scheduler component configurable to classify tasks initiated by sessions in at least two different groups at the same time and limit access to the virtual processes by each task based at least in part on the at least two different groups in which that task in classified ([0598], [0582], [1121]).

17. As to claim 21, Elliot teaches comprising a clock and where the priority scheduler component is configurable to classify a task initiated by a user into a group based at least in part on the time of day ([1908]).

18. As to claim 22, Elliot teaches a resource usage monitor that is configurable to record recent resource usage by one of the plurality of sessions and where the priority scheduler component is configurable to classify a task initiated by the one of the plurality of sessions in a group based at least in part on that session's recent resource usage (current utilization statistics) ([1203] and [1240]).

Response to Arguments

19. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

20. *Applicant argues on pages 9-10 of the Remarks that Elliot does not teach initiating one or more database sessions in response to one or more user logons.*

Elliot teaches login information such as their User ID and Password before initiating a database session ([3270], [3276], and [3535], etc.). The broadest reasonable interpretation of a database session is merely any activity involving a database. As shown in the office action, Elliot teaches using a database (see rejection of claim 1, and also [2668], [3276], and [3535], etc.).

21. *Applicant argues on pages 9-10 of the Remarks that Elliot does not teach the “database session”.*

In response, the Examiner respectfully disagrees. Again, the broadest reasonable interpretation of a database session is merely any activity involving a database. As shown in the office action, Elliot teaches using a database (see rejection of claim 1, and also [2668], [3276], and [3535], etc.).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2195

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
7/27/05

MAJID BANANKHAH
PRIMARY EXAMINER

